

ABSTRACT

A micro-electromechanical system comprises a substrate (S) and at least two micro-elements (1, 2) of which a first is bistably switchable. The micro-elements (1, 2) have faces (3a, 4a) facing one another, which are produced by a structuring method and thereby initially have at least one minimal distance from one another characteristic of the structuring method. The first micro-element (1) is then switched to the other stable state (B) whereby the distance between the faces (3a, 4a) facing one another is smaller than the characteristic minimal distance for the structuring method. The micro-electromechanical system can be constructed as an electrostatically actuatable microswitch with improved switchability. Laterally and horizontally operating micro-electromechanical systems with new functionality and current-free closed relays can be implemented.

(Figure 1)